



Case report

Ice pick death: A case report and discussion of the injury pattern



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ABSTRACT

Death due to ice pick injury rarely reported in forensic literature. We report death of a 16-year old male, who was allegedly assaulted on chest, back and thigh by his school-mate, with an ice pick. The accused had got the ice pick from his father's ice shop to attack the victim. The multiple stabs to the chest region had perforated the lung and penetrated the heart chambers. The victim succumbed to death on the way to hospital and medico-legal autopsy was conducted. The injuries inflicted by the ice pick are highlighted and its pattern is discussed in this article, owing to the peculiar nature of the wounds produced by the ice-pick.

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1. Introduction

Stab wounds are those which are produced by pointed instruments. To 'stab' is to thrust or impale i.e. the wound is produced by a thrusting motion along the axis of the instrument.¹ Clinically, stab wounds can be classified into three types namely punctured wound, penetrating wound and perforating wounds. Puncture wounds are caused by weapons that enter into the part of body without entering into any of the body cavity as in a screw driver injury sustained on the gluteus muscle on the buttocks. Penetrating wounds are produced when the weapons just enters into the body cavity producing only one wound i.e. wound of entry. Perforating wounds are those when the weapon enters into body with an entry wound and exits the body producing another wound.¹ Ice-pick can produce any of the three pattern of stab injuries mentioned above. Fatal Injury due to ice-pick is rarely reported in the available medical literature. We encountered a case where death occurred due to ice-pick injuries and the alleged manner was homicidal. The authors have discussed the injury highlighting the peculiar pattern of wounds produced due to ice pick in this article.

2. Case report

2.1. Alleged history

A juvenile school boy was attacked by two of his classmates while returning from school. During the scuffle, one of the classmates stabbed the victim on his chest and thighs with an ice-pick. The victim was taken by his friends to a local hospital, where he was referred to higher center, but was declared dead on arrival. The body of the deceased was taken to mortuary for medico-legal autopsy. The police had recovered the blood stained ice-pick. The accused had acquired the ice-pick from his father's ice-shop.

3. Autopsy findings

3.1. General

A thin built body of a young male of age 16 years, wearing school uniform was brought to the mortuary in a state of full rigor mortis, all over the body. Post mortem lividity present over the back and dependant areas, except at pressure areas. Eyes and mouth were closed and no signs of decomposition were present.

3.2. Description of injuries: (Fig. 1)

- a) A circular shaped stab wound measuring (0.4 × 0.4) cm, with contused margins was present over the right side of the chest

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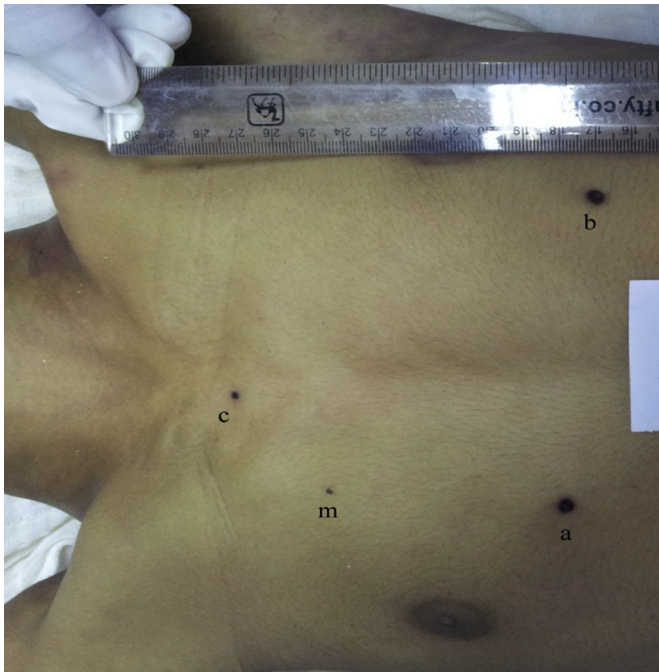


Fig. 1. a, b and c – Demonstrates the ice-pick stab wounds as described in injuries m – demonstrates the mole.

on its anterior aspect. The wound was 3.5 cm right to midline, 14.5 cm below the mid-point of right clavicle, 5.5 cm below and medial to right nipple. The track of the wound was directed downwards, backwards into the chest cavity, cutting through the skin, superficial fascia, muscles and through the 4th intercostal space, perforating the lower lobe of right lung. The right lung was collapsed. The track of the wound was blood stained.

- b) A circular shaped stab wound measuring (0.4 × 0.4) cm, with contused margins was present over the left side of the chest on its anterior aspect. The wound was 5.5 cm right to midline, 14 cm below the mid-point of left clavicle, 4 cm below and medial to left nipple. The track of the wound was directed downwards, backwards into the chest cavity, cutting through the skin, superficial fascia, muscles and through the 4th intercostal space, pericardium into the cavity of left ventricle, through a stab wound on the anterior wall of the heart. The track of the wound was blood stained. The pericardial cavity contained clotted blood and fluid of about 400 cc.
- c) A circular shaped stab wound measuring (0.1 × 0.1) cm, with contused margins was present over the midline on the anterior aspect of the chest. The depth of the wound was 0.3 cm, reaching upto anterior surface of manubrium.
- d) An oval shaped stab wound measuring 0.4 × 0.3 cm was present at the left upper back region. The depth of the wound was 0.6 cm, reaching upto the dorsal surface of scapula.
- e) A reddish colored abrasion measuring 0.4 × 0.4 cm was present in the upper one-third of right thighs on its anterior aspect.
- f) A reddish colored abrasion measuring (1 × 1) cm was present at the tip of nose.

Internal examination revealed chest cavity contained about 250 ml of blood and no other abnormalities were detected in rest of the organs. The cause of death in this case was cardiogenic shock as a result of cardiac tamponade.

4. Discussion

According to Merriam-Webster dictionary, ice pick is a hand tool, ending in a spike for chipping ice.² (Fig. 2) This tool can produce stab injury over the body, when thrust with its pointed end. The severity of injury produced by it depends upon the configuration and sharpness of the tip of it. The sharper, more needle like the tip, the more readily it will perforate the skin.³

Stab wounds caused by pointed weapon like ice-pick may pose difficulty in cases where the injuries are inflicted over relatively inconspicuous parts of the body (Concealed/obscure wounds) especially when inflicted into the ears, medial canthus of eyes, nostrils, nape of the neck, under fold of breasts and natural openings of body (umbilicus, vagina, anus, etc).¹ It may be easily missed, if it is inflicted on hairy parts of body (axilla, pubis, scalp etc). The difficulty is manifold, if such injuries are to be located in a decomposed body.

A stab wound produced by an ice-pick may resemble skin lesions, such as a mole, which was demonstrated in this case ('m' in Fig. 1). Ice picks produce small, round, or slit-like wounds that can be easily missed or confused with wounds caused by 0.22-caliber bullets or shotgun pellets.⁴ Due to the elastic nature of the skin such wounds tend to appose once the weapon is withdrawn and may bleed minimally externally. Life threatening internal hemorrhage and organ damage can be overlooked due to inconspicuous nature of the surface wound.

Ice pick producing stab wounds are usually homicidal in manner; however issue of accidental/suicidal manner needs to be kept in mind. Multiple stab wounds scattered on various parts of the body either accessible or inaccessible indicate homicidal nature.¹ Suicidal stabbing is characteristically associated with tentative wounds, and is found on uncovered parts of the body. Accidental stabbing is uncommon event but may occur as in fall into a projected instrument like broken bottles or running into a pointed end of pole.¹

In our case, multiple stab wounds were present as mentioned above, on the either side of the anterior chest. The left stab wound had perforated the pericardium and penetrated the left ventricle of the heart, which was by itself enough to be fatal. The pericardial tamponade caused due to the extravasated blood was also sufficient to cause sudden death. The right stab wound had the potential to be fatal, if untreated, as it had perforated the pleura as well as the lower lobe of right lung. The stab wounds on the upper chest region ('c' in Fig. 1) and upper back region were superficial punctured wounds as they were present on an area with minimum soft tissue and underlined by bone. It is important to observe that the same weapon had inflicted two different types of stab wounds i.e. punctured and penetrating wounds depending on the body site and force of infliction of stab.

The authors while reporting this case, observed the need for care and protection of juveniles in conflict with law, as they could



Fig. 2. Ice-pick.

access weapons like ice-pick and involve in crime against society. This paper highlights the pattern of injuries caused by relatively rare weapon like ice-pick, which tend to be missed or at times confused with various other entities like mole, bullet injuries etc during autopsy.

Ethical approval

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Conflict of interest

There is no conflict of interest in publishing this article.

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